

Manufacturer: Bose
Model: EX Series
Device Type: Digital Signal Processor



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Bose EX Series Generic Control v3.0
CATEGORY:	Conferencing
VERSION:	3.0
SUMMARY:	The Generic Control Component is used for any control in the protocol document that is not supported by the modules above. This can virtually be used for any control in the API, but requires a bit more setup. This is a great component to use to control DSP elements that aren't typically controlled by control systems.
GENERAL NOTES:	IMPORTANT: While this module suite supports the majority of the Bose EX Series family, there may be certain modules or module attributes that are not supported by certain devices. Please refer to the Bose ControlSpace Serial Control Protocol v5.10 documentation for more information regarding which controls are supported for the device you are using.
CRESTRON HARDWARE REQUIRED:	Crestron 3-Series or 4-Series processor.
VENDOR FIRMWARE:	v2.520

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PARAMETERS:

Module_Name	Set to the name of the module that will be controlled.
Signal_Type	Set to the signal type that will be used on the generic module. Options include: Digital, Analog, or Serial. This will only enable the signals assigned to the category that have been selected by this parameter.
Enable_Subscription	Set to 'enable' to allow the module to subscribe to feedback of the specified control.
Index_1	Set to the value of the Index 1 parameter for the attribute required in the protocol document to control the specified control.
Index_2	Set to the value of the Index 2 parameter for the attribute required in the protocol document to control the specified control.
Analog_Upper_Limit	Set to the desired upper limit of the specified control. This parameter is only read if the Signal_Type parameter is set to 'Analog'.
Analog_Lower_Limit	Set to the desired lower limit of the specified control. This parameter is only read if the Signal_Type parameter is set to 'Analog'.
Analog_Step_Size	Set to the desired step size when the Analog_Increment and Analog_Decrement signals are pulsed. This parameter is only read if the Signal_Type parameter is set to 'Analog'.
Analog_Scaling_Offset	Since Simpl Windows only supports 16-bit integers for numbers, in order to set floating point numbers a scaling offset must be implemented where a value divided by this scaling offset will create the desired floating point value required by certain controls. (See example below)
Command_Processor_ID	The unique identifier for the command processor module this module will register with.

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**CONTROL:**

Poll	D	Pulse to poll for the current value of control.
Digital_On	D	Pulse to set the state of specified control to 'on'.
Digital_Off	D	Pulse to set the state of specified control to 'off'.
Digital_Toggle	D	Pulse to toggle the state of specified control.
Analog_Increment	D	Pulse to increment the value of the specified control.
Analog_Decrement	D	Pulse to decrement the value of the specified control.
Analog_Value	A	Set to the desired value of the specified control.
Analog_Value_Set	D	Pulse to set the value of the specified control to the value of the 'Analog_Value' signal.
Analog_Percent	A	Set to the desired percentage of the specified control.
Analog_Percent_Set	D	Pulse to set the value of the specified control to the percent value of the 'Analog_Percent' signal.
Serial_Value	S	Set to the desired string value of the specified control.
Serial_Value_Set	D	Pulse to set the string value of the specified control to the value of the 'Serial_Value' signal.
Enable	D	Latch high to enable this component.

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**FEEDBACK:**

Is_Initialized	D	Indicates the module is registered to the command processor and is synchronized with current device state when the signal is high, or not synchronized with current device state when the signal is low.
Digital_Is_On	D	Indicates that the specified control is set to 'on'.
Digital_Is_Off	D	Indicates that the specified control is set to 'off'.
Current_Analog_Value	A	Displays the current analog value of the specified control.
Current_Analog_Percent	A	Displays the current percent value of the specified control in relation to the Analog_Upper_Limit and Analog_Lower_Limit parameters.
Current_Serial_Value	S	Displays the current string value of the specified control.
Is_Quarantined	D	Indicates that there was a problem getting this component initialized due to a configuration issue when the signal is high, or that no initialization issue occurred when the signal is low. A quarantined component will not prevent the command processor or other components from getting initialized.

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**TESTING:**

OPS USED FOR TESTING:	CP3 1.8001.4788.20471 MC4 2.7000.00040
SIMPL WINDOWS USED FOR TESTING:	4.2000.00
CRES DB USED FOR TESTING:	212.0500.002.00
DEVICE DATABASE:	200.19000.002.00
SYMBOL LIBRARY USED FOR TESTING:	1168
SAMPLE PROGRAM:	Bose EX Series v3.0 IP Demo.smw Bose EX Series v3.0 RS232 Demo.smw
REVISION HISTORY:	v3.0 – Initial Release